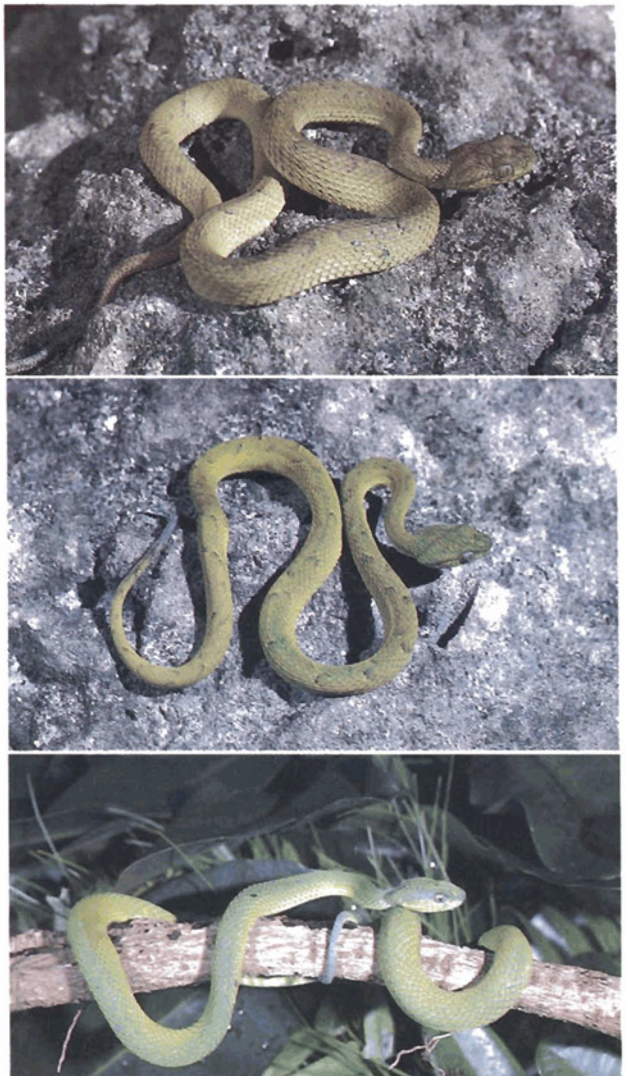
Catalogue of American Amphibians and Reptiles.

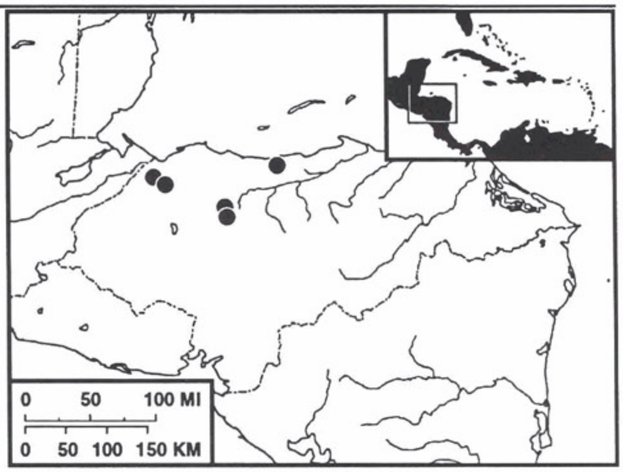
Wilson, L.D. and J.R. McCranie. 1992. *Bothriechis marchi.*

Bothriechis marchi (Barbour and Loveridge)
March's Palm-pitviper

Bothrops nigroviridis marchi Barbour and Loveridge, 1929:1. Type-locality, "the Gold Mines at Quimistan [probably = El Oro, Municipio de Quimistán, in the Sierra del Espíritu Santo to the northwest of the town of Quimistán], [Departamento de] Santa Barbara, Honduras Republic." Holotype, Museum of Comparative Zoology at Harvard College (MCZ) 27260, an adult female collected by Douglas March in November 1928 (examined by LDW).
Bothrops nigroviridis: March, 1929:58.
Trimeresurus nigroviridis marchi: Clark and Inger, 1942:232.
Trimeresurus nigroviridis: Pope, 1955:pl. 148.
Bothriechis nigroviridis marchi: Hoge and Romano Hoge, 1983:106.
B[othriechis]. aurifer marchi: Burger, *in* Pérez-Higareda, et al., 1985: 104.
Bothrops marchi: Wilson and Meyer, 1985:120.
Bothriechis (Bothrops) marchi: Mehrtens, 1987:345.
Bothriechis marchi: Campbell and Lamar, 1989:164.



Figs. 1-3. USNM 319942 from Quebrada de Oro, Atlántida, Honduras; photographed in August 1989, October 1989, and July 1990.



Map. Circles indicate acceptable localities. The uncertain type-locality is not indicated.

• **Content.** No subspecies are recognized.

• **Definition.** *Bothriechis marchi* is a medium large (*sensu* Wilson and Meyer, 1985), relatively slender, arboreal, prehensile-tailed pitviper. Total length is known to range to 968 mm, with specimens stated to "frequently [exceed] 800 mm" (Campbell and Lamar, 1989). The dorsum of the body and head in adults is essentially uniform lime green, bluish green, or yellowish green. Some specimens appear to have black edging on the scales of the dorsum, although Wilson and Meyer (1985) suggested, based on Campbell's (1982) work, that such is an artifact of preservation, with the black coloration of the undersurfaces of the free edges of the scales showing through. Other specimens possess irregular blue, chartreuse blue, or yellowish green mottling or spotting on the dorsum of the body. The venter is uniformly yellow, yellowish green, or bluish green. The iris is yellow to yellowish green. Juvenile dorsal coloration is either yellowish green or pale brown, with blue or dark brown blotching, respectively. Scutellation is as follows: 19-21 (mode 19) keeled scale rows at midbody; 156-174 ventrals in males, 157-171 in females; 59-69 undivided subcaudals in males, 55-65 in females; 9-12 (mode 10) supralabials; 10-13 (usually 11 or 12) infralabials; 2 canthals; 1-4 intercanthals; 3-7 interoculars; 2-6 prefoveals; usually no subfoveals; usually 1 large (occasionally 2 or more) and 2 (1-4) small postfoveals; 1-3 (usually 2) suboculars; 1-3 (usually 2) postoculars; oculabial single. The loreal is single. The keeling of the scales on the top of the head is variable. The internasals and supraoculars are never keeled. The canthals are most often not keeled. The intercanthals and interoculars are not or only lightly keeled. The scales of the parietal region usually are smooth or lightly keeled. All the scales of the temporal region are heavily keeled, except those of the row adjacent to the supralabials, which may or may not be lightly keeled. The anal plate is single.

• **Diagnosis.** *Bothriechis marchi* differs from other members of the genus except for *B. rowleyi* in the following combination of characteristics: supraoculars normal, not extended into soft spine like or hornlike processes; modal number of midbody dorsal scale rows 19; dorsum without black middorsal markings; venter uniformly colored; no yellow paraventral stripe; iris yellow to yellowish green; interoculars smooth. Data on variation in scutellation and color pattern given by Campbell (1982), Campbell and Lamar (1989), and Crother et al. (1992) show overlap in diagnostic features between *B. marchi* and *B. rowleyi.*

• **Descriptions.** The most complete descriptions of the color pattern and scutellation of *Bothriechis marchi* were provided by Wilson and Meyer (1985) and Campbell and Lamar (1989).

• **Illustrations.** Color photographs of *B. marchi* are in Campbell and Brodie (1992), Campbell and Lamar (1989), Cruz (1987), Mehrtens (1987), and Wilson and Meyer (1985). Black and white photographs are in Barbour and Loveridge (1929), Cochran (1943, 1944), Ditmars (1930, 1931), and Pope (1944, 1955). A photo-

graph of the microdermatoglyphic pattern is in Hoge and Romano Hoge (1983) and a drawing of the scutellation of the dorsal surface of the head is in Crother et al. (1992).

• **Distribution.** The species is known from montane regions in northwestern and north-central Honduras. Many old museum specimens carry obviously erroneous locality data (e. g., San Pedro Sula, Tela), general localities (e. g., Cofradía-Santa Bárbara road), or some that are questionable (e. g., Quimistán, Santa Bárbara [these two, in addition to there being towns of these names at elevations below 250 m, are also municipalities in which suitable montane habitat for *B. marchi* occurs]). To compound matters, specimens without locality data that were apparently purchased from animal dealers during the 1970's and1980's have ended up in museum collections, many of which now carry estimated localities (e. g., the UTA and KU specimens from Cortés listed by Crother et al., 1992; these authors opined that the material actually arose from the Sierra de Omoa, located to the west [not north and east as stated] of San Pedro Sula). Based on our field experience, the lowest locality for *B. marchi* which we are able to accept is La Cumbre, Cortés (ca. 500 m) whereas the species is known to occur as high as 1540 m (El Cusuco, Cortés). The few specimens we have collected were in the vicinity of streams in Premontane Wet Forest and Lower Montane Wet Forest formations of Holdridge (1967). The ecological distribution, thus, is securely understood to include the Premontane Wet Forest and Lower Montane Wet Forest formations. Villa (1962) recorded this species from Nicaragua, but later (1984) expressed doubt that *B. marchi* actually occurred in Nicaragua. Until actual Nicaraguan specimens of *B. marchi* are available, the species canot be considered a component of the Nicaraguan herpetofauna.

• **Fossil Record.** None.

• **Pertinent Literature.** Crother et al. (1992) discussed the phylogenetic relationships of *B. marchi* within *Bothriechis* based upon biochemical and morphological data. Murphy and Mitchell (1984) and Rokosky (1942) provided information on birth in captivity and juvenile color variation, Clark and Inger (1942) the scale reduction formula, March (1929) information on human envenomation, Snider and Bowler (1992) longevity in captivity, and Campbell and Lamar (1989) listed some of the literature.

• **Remarks**. Two recently collected specimens that have not been previously mentioned in the literature are Royal Ontario Museum (ROM) 20016 from El Cusuco, 1540 m, Departamento de Cortés and National Museum of Natural History (USNM) 319942 from Quebrada de Oro, 1090 m, Departamento de Atlántida. The latter specimen was recently born when collected on 6 August.

• **Etymology.** The name *marchi* is a patronym honoring Douglas March, the collector of the type series.

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